DOCUMENT RESUME

ED 431 102 CE 078 765

AUTHOR	Stern, David; Briggs, Derek
TITLE	Competition or Complementarity between Work and School: Some Insights from High School Students.
INSTITUTION	National Center for Research in Vocational Education, Berkeley, CA.
SPONS AGENCY	Office of Vocational and Adult Education (ED), Washington, DC.
PUB DATE	1999-04-21
NOTE	24p.; Paper presented at the Annual Meeting of the American Educational Research Association (Montreal, Quebec, Canada, April 19-23, 1999).
PUB TYPE	Information Analyses (070) -- Speeches/Meeting Papers (150)
EDRS PRICE	MF01/PC01 Plus Postage.
DESCRIPTORS	*Academic Achievement; *Cooperative Education; *Education Work Relationship; Educational Attitudes; Educational Research; Employment Patterns; *High School Students; High Schools; Literature Reviews; *Student Attitudes; Work Attitudes

ABSTRACT

The question of how some high school students succeed in reconciling school and work was examined through a review of research on the topic. Special attention was paid to the comments made by students responding to the National Center for Research in Vocational Education's longitudinal study that followed approximately 1,500 students in high schools and two-year colleges from fall 1988 through spring 1992. When asked to compare work (paid or unpaid) and school, some students saw school and work as mutually reinforcing, whereas others did not. The question of the relative importance of school and work elicited a continuum of responses, ranging from the view that jobs are valuable only as a way to make money but school is more valuable to the view that jobs are more valuable than school. The intermediate position was that both school and work have value because they demand responsibility and develop various capacities. A number of students acknowledged that combining school and work requires careful management of time. Most students indicated that parents' education is not the only factor influencing students' decision to attend college. Students' own opinions of the relative value of school and work are also important. (Contains 17 references.) (MN)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

COMPETITION OR COMPLEMENTARITY BETWEEN WORK AND SCHOOL: SOME INSIGHTS FROM HIGH SCHOOL STUDENTS[1]

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
This document has been reproduced as received from the person or organization originating it.
Minor changes have been made to improve reproduction quality.
Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

David Stern and Derek Briggs
University of California at Berkeley

D Briggs

Presentation at AERA Conference on April 21, 1999

ED 431 102

Teenage students in the United States spend more time in paid employment than their counterparts in other countries, except in Germany and neighboring nations where most teenagers take part in formal apprenticeships. Unlike apprenticeships, the jobs held by the great majority of American students are not connected with their schooling. The lack of connection between students' schoolwork and their paid work in the U.S. causes concern among some parents, educators, and analysts who fear that working detracts from students' academic effort and performance. One kind of policy response that is sometimes proposed would simply tighten child labor laws to prevent students from working more than 20 hours per week.

Another kind of policy response focuses not on the number of hours, but on strengthening the connection between students' jobs and their academic coursework. Policies enacted in several states during the 1990s, and the 1994 federal School-to-Work Opportunities Act, have encouraged various forms of structured "work-based learning" that is deliberately linked to what students are learning in school (Education Commission of the States 1997; Urquiola et al. 1997). Educators have created curriculum modules for students to learn theoretical concepts through analysis of experiences in workplaces (Vickers 1996). These policies and practices have engendered some controversy, especially as proponents have advocated work-based learning not only for

---

[1] Research reported in this article was supported by the National Center for Research in Vocational Education, University of California at Berkeley, with funds from the Office of Vocational and Adult Education, U.S. Department of Education. The views expressed here are not necessarily those of the funding agency. James R. Stone, III, and Charles Hopkins of the University of Minnesota, and Martin McMillion of Virginia Polytechnic Institute and State University, collaborated with David Stern and Helen Cagampang in the design and collection of the longitudinal survey that produced the data analyzed here.

CE 078 765

BEST COPY AVAILABLE

students in vocational courses, but also for students in the advanced academic, college-prep track (Bailey and Merritt 1997).

Despite these policy proposals and initiatives, a large majority of high school students continue to hold paid jobs during the school year, often working more than 20 hours a week, and mainly in jobs that still have no formal connection to school. Previous research on working students has revealed a curious pattern: students who work a moderate number of hours per week, usually less than 15 or 20, actually perform better in school than students who do not work at all, and they also perform better than their peers who work longer hours per week. The purpose of this paper is to describe how some students succeed in reconciling school and work, drawing on statements written by working high school students themselves.

The inverted U

A 1995 review by Stern et al. (pp. 41-44) summarized the research up to 1993 on the academic performance of working high school students. Ten studies found that students who worked more than 15 or 20 hours a week had lower grades, did less homework, were more likely to drop out, or were less likely to complete postsecondary education, compared to other students. Three studies found no significant differences associated with working long hours. As for students working less than 15 or 20 hours a week, five studies found they had better grades, test scores, or likelihood of going to college than students who did not work at all, although three studies found that students who worked moderate hours did worse in school than students who were not employed.

Three more recent studies have found additional evidence that the association between hours of work and performance in school follows an inverted-U pattern, with students who work moderate hours performing at a higher level than students who work more, or not at all. Light (1997) analyzed high school transcript data from the NLSY 1979 cohort and discovered that students who worked 1-20 hours per week on average completed more course credits -- with a larger share of those credits in math and science -- and still

received better grades than students who did not work at all, or those who worked more than 20 hours a week.

Mortimer and Johnson (1997, 1998) also found some evidence of the inverted-U pattern in their longitudinal study of high school students in St. Paul, Minnesota. When they examined academic performance in high school, the researchers found that "seniors who limited their hours of work had higher grade point averages than those who worked more than 20 hours per week and those who did not work at all. However, the fact that this pattern occurred in only one year detracts from the argument that moderate employment has pervasive achievement-related benefits." (Mortimer and Johnson 1998, pp. 200-201)

The inverted U is somewhat more pronounced in the St. Paul data on enrollment in postsecondary education, especially for young men. Unlike previous studies, the St. Paul study distinguished between the duration and intensity of employment: that is, between how many months a student worked during the high school years, and the student's average number of hours worked per week. In theory, long duration might indicate steadiness and ability to hold a job, while high intensity might signal a disinterest in school. Therefore, a student who accumulated a total of, say, 1000 hours of employment over a four-year period by working in short bursts of 30 or 40 hours a week might be quite different from a student who worked steadily at a pace of 8 to 10 hours a week. Dividing students into four groups classified as high or low on duration and intensity according to their work pattern while in high school, Mortimer and Johnson (1997) found that young men in the high duration, low intensity category completed more months of postsecondary education in each of the four years after high school, compared to the other three categories of working students, and also compared to students who did not work at all in high school. The difference remained statistically significant in each year even when socioeconomic background was controlled, although it became non-significant in the first and fourth year after high school when differences in ninth grade grades, educational goals, and intrinsic motivation toward school were also controlled (p. 29). For young women the pattern was less consistent, but by the fourth year after high school those who had worked less than 20 hours a week during high school were completing more months of postsecondary schooling

than those who had worked more than 20 hours a week and those who had not worked at all (p. 32). A graphical depiction of the inverted U is presented in Figure 1.

The NCRVE longitudinal study

A third source of recent evidence is the longitudinal survey conducted by the National Center for Research in Vocational Education (NCRVE). This survey followed roughly 1,500 students in high schools and two-year colleges from fall 1988 through spring 1992. A complete description of the sample and survey procedures is given in Cagampang and others (1993).

Each student was surveyed in fall and spring of the baseline academic year, then once a year after that. In addition to questions about their family background, students were asked about their school experience, their work experience, their attitudes toward work, and their aspirations about their career and educational goals. Parallel surveys were completed by the students' teachers and employers to yield additional information about perceptions of school and work experiences. In addition, student grades, coursework patterns, and standardized test scores were made available by the schools for the study participants.

Study sites were chosen because they offered cooperative education programs that created relatively strong connections between the worksite and the school by means of written training plans, visits by school personnel to the students' workplaces, and participation by job supervisors in awarding students' grades. One purpose of the survey was to compare the experiences of co-op students with that of other employed students who were not in co-op, and with students who were not employed at all.

Two of the high school sites began the surveys in fall 1988, the other two in fall 1989. The first two high school sites were located in an industrial city in the midwest (Midcity) and a suburban county next to a medium-sized city in the South (Southvale)[2]. Midcity students were from two magnet schools with

[2] Pseudonyms are used because the data were collected under a guarantee of confidentiality.

specialized programs in business careers and in technical and trade occupations. Southvale had four comprehensive high schools and a regional vocational center with business and marketing classes, all offering co-op.

The other two secondary sites were located in a rural southern community (County High), and a suburban school district next to a midwestern city (Anytown). County High was a comprehensive high school where students participated in co-op programs that were either diversified to various occupations or oriented to agriculture. Anytown had three large comprehensive high schools with co-op programs in business, marketing, trade and industry, health occupations, and home economics related occupations.

The inverted-U relationship between high school grade-point average and hours worked per week on the current job was replicated in the NCRVE data. Students who were not working had lower average grades than those who were working in non-co-op jobs. Co-op students, who on average worked longer hours than non-co-op students, had the lowest average grades (Stern et al. 1995, pp. 45–47). Within both the co-op and non-co-op groups, longer hours were associated with lower grades, but the association was weaker within the co-op group (Stern et al. 1997, p. 221).

Do students see school and work as mutually reinforcing, or as competing alternatives?

The inverted-U pattern seems to be a common empirical finding, but its interpretation is ambiguous. Students who work long hours may get lower grades and ultimately complete less education because they were less interested in school, or more interested in work, to begin with. Alternatively, working long hours may divert students' time, energy, and attention away from school, so that even if they were interested in school their academic performance deteriorates. Choosing between these two interpretations is ultimately impossible without doing some kind of planned experiment, which is hard to imagine.

Similarly, students who spend moderate amounts of time working may perform better in school than students who do not work at all because they were

generally more capable individuals to begin with. Alternatively, academic performance may somehow be enhanced by work experience, provided that working hours are limited.

Although the evidence available cannot support a definitive judgment of cause and effect, it is possible to gain some insights from what working students themselves say. Do they feel that working conflicts with school, or are the two activities mutually reinforcing? Why? Students in the NCRVE survey wrote statements about this issue at the end of the baseline questionnaire, where they were given the following prompt:

> ***In the space below, compare working (paid or unpaid work) and school. What differences do you see? What similarities do you see?***

The students' written statements reveal a range of opinions, which help explain how some manage to combine work and school without detriment to their academic performance.

Felicia[3], a junior at a high school in suburban Southvale, gives an example of how work and school can be seen as mutually reinforcing:

> *Working and school are very much alike because they both require you to have responsibilities and both require you to be challenging and creative. You are basically getting graded on both of them depending upon your ability or the effort you put toward them. I have realized that both of them will really help your future. (530425)*

At the time she wrote this, Felicia was intending to go to college and major in music and performing arts. As a high school junior she took her first paid job, working as a sales clerk in a clothing store 15 hours during the school week and 5 to 10 hours on weekends. The job was a cooperative education placement, connected to a class in fashion merchandising, with a written training plan developed by the teacher and the job supervisor. Felicia's statement is consistent

---

[3] All names used for students are pseudonyms. Students' statements are transcribed here as written, without correcting errors in spelling or grammar. Numbers in parentheses were assigned to individual students for purposes of the longitudinal survey.

with the design of co-op, to align the demands of work and school by having the teacher and job supervisor collaborate on setting expectations and evaluating students' performance.[4] Although co-op in high schools has traditionally been associated with vocational education that is not oriented toward college, in some schools it does attract college-oriented students like Felicia. She graduated the next year with a 3.66 grade-point average and subsequently did enroll in a four-year college, while continuing to work part-time.

In contrast to Felicia's perception that her schooling and her work experience would both help her in similar ways, a view of work as more valuable than school was stated by Joan, a senior in the same high school:

> *At work I am doing something that interests me so I enjoy it more. School they teach you things that you won't usually use later on in life. (530472)*

When she wrote that statement, Joan was holding two jobs. One she had started in eighth grade, working 12 hours a week and continuing through senior year. She helped her mother and uncle provide janitorial services to banks (her mother also had another job in a bank, processing credit card applications). More recently, she started a second job, as a sales clerk in a clothing store (not the same store as Felicia's), working 13 hours on weekends. It was the second job that she found more interesting: on the questionnaire she rated the second job more challenging, satisfying, and offering more chances to learn new things than the first job. Unlike Felicia, Joan did not perform very well academically. She finished high school with a 1.91 grade-point average and did not go on to college, despite her stated aspiration (on her senior-year questionnaire) to acquire a master's degree and become a fashion designer. She did continue to work.

Although Joan and Felicia had similar high school jobs which they both found worthwhile, and both reported working at least 20 hours per week, Felicia kept her grades up and went to college, while Joan did not. Felicia found work and school to be mutually reinforcing both in high school and afterward, but Joan seemed to feel it was necessary to choose one or the other, and she

---

[4] For evidence that high school co-op students report a closer relationship between school and work than students employed in non-co-op jobs, see Stone et al. (1990), Stern et al. (1997).

eventually chose work. This difference could be due to family circumstances or values, personal preferences, or other differences between the two young women. In addition, it is also possible that Joan would have done better academically if she had participated, like Felicia, in co-op or some other arrangement that helped her to see a connection between school and the work she valued. This conjecture is further elaborated below.

At another high school in Southvale, three young men who were seniors wrote statements that also illustrate how some students view school and work as mutually reinforcing, while others do not. Bruce started working for pay in eighth grade, cutting grass and trimming shrubs, then in tenth grade as an assistant in an electronics repair shop. During junior and senior years he worked 18 hours a week -- 14 hours during the school week and four hours on weekends -- in the kitchen at a retirement home, where he washed pots, ran the dishwasher, served food, and pushed carts. Other than giving him a chance to meet people of different ages, this job did not offer a great deal of variety or challenge, and Bruce reported on his questionnaire that his reasons for wanting the job were to make money to buy things and save for future education. Nevertheless, his responses indicate a conscientious attitude, and at the end of the questionnaire he wrote:

> *In both working and in school, I am given responsibilities. I have to get to both places on time. I have assigned work to do and I have a certain time period to do it in. At work I listen to a supervisor and at school I listen to a teacher. Both require me to use some kind of skills, or abilities. At work, it is mostly physical. At school, it is mostly mental.*
>
> *There are only a couple of differences. At school I have some freedom of when to do work or how do it. At work I don't get that freedom. Also, I come to school because I want to. I work because I get paid for it. (230541)*

Like Felicia, Bruce was a successful high school student. He had a leadership role in the school newspaper, graduated with a 3.05 grade-point average, and went to college, where he continued working. As a high school senior, his sights were set on law school. It seems clear that he was more

committed to school than to his high school job, but in spite of its routine nature and the lack of any formal connection to school, he saw the job as a place to exercise his personal and social capabilities, just as in school.

Tom, also a senior at the same high school as Bruce, saw things differently. After working as a cook and food counter person in grades 10 and 11, he found a job in his senior year working 12 hours during the school week and 8 hours on weekends at a Sears telecatalog center, where he handled customer complaints and helped others at the center answer questions about catalog orders. As his written statement indicates, he found this job more interesting than school:

> *I think at work that I am more motivated than I am at school. At work I know that I am getting paid for being there.*
>
> *In a way work is like school. I learn something new at work every day. You also have to be on time to work as well as school.*
>
> *I do a lot more at work than I do at school. I also have to dress nice at work, where at school who cares. At work I have a lot of older friends. This makes me feel older too. (230542)*

Like Joan, Tom found a high school job that interested him, and he also did not perform well academically, graduating with a grade-point average of 2.36. And, like Joan, he continued working after high school but did not go to college. The fact that Tom's job at Sears was a co-op placement, with a training plan and joint evaluation by a teacher and job supervisor, did not suffice to keep Tom interested in further education. Actually, Tom is more typical of co-op students in the NCRVE study than Felicia is: on average, co-op students have lower grades and are less likely to go to college (Stern et al. 1995, 1997). Keeping students like Joan and Tom interested in further schooling would apparently require more than a demonstration of positive connections between school and work, but also other kinds of direct support to boost their academic success.

It is sometimes difficult to explain why students interpret and represent their experiences in one way rather than another. For instance, why did Bruce

write positively about work that he did not find very interesting? In contrast, Fred, also a senior at the same high school as Bruce and Tom, was outspoken in his dissatisfaction with his job at an azalea nursery, where he worked six hours during the school week and 15 hours on weekends:

> *Working will earn you money while school earns you an education. I believe an education is more important than making money. School is also a totalitarian government, while I hope my job scene is more democratic. I had the unlucky chance of finding a job whereas I hated the work and the bosses. The job used none of my talent, intelligence, personality, innovativeness, and energy. This is not a good scene to compare school to, but I can safely say school has offered much. (230538)*

Fred started working in eighth grade, mowing lawns, before starting at the azalea nursery in tenth grade. His resentment of the job seems to reflect in part a general dislike of authority (school is a "totalitarian government"), and on the questionnaire he reported that his job supervisor was demanding, did not listen, and usually did not treat him fairly. Whether the negative experience was a product of Fred's personality or a hostile supervisor, or both, it obviously did not make Fred want to quit school and go to work. Instead, he finished high school with a 3.46 grade-point average and went to college, where he also continued to work part-time.

A continuum of opinions

Fred's statement can be seen as one end of a continuum of responses given by working students, ranging from those who prefer school to those who prefer work. (See Figure 2.) The view at Fred's end of the continuum could be summarized as: **The job is valuable only as a way to make money; school is more valuable**. At the other end of the continuum is a belief that the job is more valuable than school. The intermediate position is that both school and work have value. Several examples of each view are transcribed here.

Another example of the view that the job is valuable only as a way to make money was given by a Southvale high school senior, employed 20 hours a

week as a waitress, who indicated on the questionnaire that her sole reason for working was to buy a horse. At the end she wrote:

> *Differences: School (1) has a purpose, (2) is challenging, (3) rewarding. Job (1) boring, (2) just there until I get my horse paid for.*
>
> *Similarities: (1) must be on time, (2) must do as told, (3) have an authority. (330663)*

A senior in Anytown echoed:

> *A job when you're in school is just for money. School is more important than a job. (260538)*

The next distinct position along the continuum of students' opinions could be stated as: **School and work are both valuable because they demand responsibility and develop various capacities.** This view was articulated by Felicia and Bruce. Many other students expressed the same idea, pointing out both similar and different benefits from school and work. Here are a few examples from County High:

> *Working and school are almost the same because they both give you an opportunity to proove yourself and others that you can do a job and keep up with the job and you can do your best on the job. They both raise your self-esteem. (140060)*
>
> *Working and school you both deal with people. You are learning new things. (140077)*
>
> *There are some differences and similarities in school and work. Some similarities are that they are both learning experiences. Also, they both help you get along with people. The differences are that work prepares you more for what's really out in the world. School is more of a relaxed and easy atmosphere. (140200)*
>
> *Both school and working prepare you for the disappointments and the great moments in life. They teach you responsibility to try as hard as you can to*

> *accomplish something. To set goals and try to reach them goals in the future. (140214)*

> *Working and school are both the same in some ways. You have to take certain responsibilities in getting there on time. You also take pride in your work as well as school. (140269)*

A junior from Anytown listed the following features of school and work, some different, others the same:

> *Working: meeting people, helping others, less variety, learn new skills, being involved w/ others, solving problems, sometimes fun/boring.*

> *School: meeting people, helping others, more variety, extra-curricular activities, more work, learn new skills, being involved w/ others, solving problems, sometimes fun/boring. (160151)*

Three Southvale students emphasized intrinsic similarities:

> *The working as well as school, teaches a person responsibility, managing money, dependability, honesty and it also prepares you for the real world, when you are out on your own. There are not any differences that I see except for you getting paid for work and not for school. (230869)*

> *I don't see many differences between work and school. The similarities I see are interaction with people, the teachers are like your boss, you do work, have homework. (330678)*

> *School and work are similar in that both challenge me physically and mentally. Both try to teach me to do my best at whatever I do and both instil a sense of responsibility in me. There are not too different from each other. One is required by law, one is required by society. I will only spend a small part of my life in school. Work, however, will make up 2/3 of my life probably. (330696)*

Another Southvale student, after noting the similarity, went on to explain that the job pays now, but school pays off later:

> *Working and going to school are somewhat similar to me because in both of them you are trying to do your best in the things you do. One difference that I see would be that if you're working you get (most of the time) paid and in school you just go to school to learn to do a job. You don't get paid in money as you do in a job but really you do get paid, you get the chance to learn and choose what you want to do. This pays off in helping you later in life. (430323)*

A number of students, while acknowledging that school and work both have value, also made the point that **combining school and work requires careful management of time**. These students in effect are espousing the hypothesis of Mortimer and Johnson (1997) that learning to juggle school and work in high school helps prepare for more of the same later on. For example, a County High student wrote:

> *Both help to prepare you for future upcoming events. They teach you how to act and how to respond to other peoples feelings. Both helps you to become a better equiped person in life. Going to school and working at the same time helps you learn more responsibility that is needed in life. (140010)*

Several Southvale students were even more explicit about time demands:

> *Working takes less time and does not require as much work yet it feels more like a burden than school does. It sometimes gets in the way of school and this is not good for school is my first priority. Working and school require many hours, provide much pressure and can wear you out. They both also provide a place to make new friends and relate with people and learn new things. (330539)*

> *I think working and school are same -- what the same because in both you have to do the same things you may not want to do and both you have to put in long hours. School is preparing you for a good job and if you do good in school you do good on a job and when you do good on a job it prepares you for maybe a raise or a place for advancement. (330672)*

> *There are many differences between schoolwork and paidwork. For example, not only is schoolwork required by law, but it prepares you for the future in a variety*

of ways. I myself do not see that jobs have effectively prepared me for either school or my life's work. I also believe that school work is easier to complete than a paid job simply because we are conditioned virtually from birth to do schoolwork. The two are similar in that they tend to monopolize time and in that they carry significant responsibility. Jobs and school both also teach cooperative/interactive skills that are necessary for all facets of ones future life, not just employment. (330693)

Work and school are alike in that they both have responsibilities you must carry out to perform well in those areas. Both also have certain times that you must attend them in order to not get in trouble or get fired. Both have authority figures (teachers in school, bosses in work) who control you in your work what you must accomplish. As far as differences, school has less of a chance of being dismissed than work does because workers (bosses) have the choice of firing you anytime they desire. School is more a personal commitment, because you're not being paid for attending. Therefore, you must have more of a drive individually to perform well in school. You must see the future rewards of schooling because no immediate, monetary rewards may be found. Also, with school, there is a lot of work outside the actual school day. Many jobs have only work required during the actual PAID workday. Both though contain a lot of STRESS that is probably uncalled for -- stress on performing the best, doing things right, etc. Taking a pessimistic outlook, for young AND old. With each area you will have problems that arise, the bad part of it all. If life could be free of problems, life would be much simpler.

My volunteer work does provide a release that I believe would be good for anyone. (430398)

Two essays from Anytown also reveal students wrestling with the competing demands of school and work:

I don't think that I have to work now -- but I do think I have to go to school. I don't think that people realize you do get paid for going to school -- it's the education and it'll make you money in the long run. It just takes awhile to see that. I wouldn't let my grades go because of work -- I'd quit working. Both are

rewarding when you see the end result but they both take up a lot of time. (360183)

I feel that school has much more importance, becuz without an education you will not get anywhere. School and work both require a lot of hard work and concentration but I feel school needs more because it is so important. I think we're too young to be working so much[5] *-- we've got our whole lives to work -- school IS work.*

Both work and school CAN give us a sense of accomplishment and a job well done -- which IS good for us. Through work and school we meet new people, make new friends, earn and give some respect to our peers and adults. (360410)

Moving along the continuum, some students' statements suggest that **work and school both have value, but on balance work has more**. Four examples come from in Anytown.

When you work it's voluntary, you're at work of your own accord, providing a service to someone, for money. At school you learn what you need to know in life under silly rules set up by superiors (and I use that word loosely) who don't remember what its like to be a kid. (260014)

In both work and school you have to try hard, and finish your work. At work you get paid. You can meet new friends at work and at school. Work and school are both fun, but can both sometimes be boring. At work I feel like I've accomplished more then at school. (360404)

School and work are somewhat alike, in both places you learn, you are supervised, there are certain times you have to be there, and you're with other people. However, at work you provide a service for people other than just learn for yourself. You also get paid. You're under less supervision than in school. (360414)

---

[5] This was written by a senior who was working 24 hours per week.

> *Both working and school are choices after you turn 16, you can quit or you can go. I need the money for college -- so I must go to both places in order to achieve my goal. School teaches things that you will never use in a job market. Everything you need these days were taught in elementary schools. A job teaches you how the world works after school. I think a job is more of an education than school and everyone should have one. (360460)*

Another statement along these lines comes from Southvale:

> *School is harder and not as fun as working is. In school you are not free to do as you please but at work I have freedoms. In both places you learn things but I seem to learn more at work. (530448)*

Finally, at the work-oriented end of the continuum, numerous students wrote that, for them, **work has more value than school**. The statements by Tom and Joan both expressed that opinion. Here is another example, from an Anytown senior who pointed out the benefit of learning in the context of real application and real consequences:

> *School is much less worthwhile than work. When you learn things at school you only remember until the test comes. After the test it is forgotten. When you learn things at work you must remember them in the future in order to do your job right. If you stay home or are late for school you might get a slap on the hand. If you stay home or are late for work without an acceptable reason you run the risk of losing your job. What you learn at work can help you in your life and job in the future. Most of what you learn at school does you no good in the real world. (160012)*

Two shorter statements in a similar vein also came from Anytown:

> *Work gives you chance to meet and work with different types of people when school doesn't. (260509)*

> *When you work it is more helpful for you than school because when you work you get more of the taste of real life and financial problems whereas when you go to school your parents pan out for you. (360473)*

Several Southvale students also valued work more than school, at least potentially:

> *I don't like school because we are forced to go, they take up to 7 hours of your day and you don't even get paid for it. As for jobs, you should choose a job that you'll enjoy. (430467)*

> *Work helps you be responsible and it pays you. School doesn't pay you and after all what do you get out of it anyway. (430864)*

> *School you don't get paid and you have to work hard, unlike work where you get paid for it. (430803)*

> *Working is more or less doing what you enjoy doing. You've chosen your job. But in school, things (some) are required. Both are hard work. But work is more a time where you can do what you want to do. If you like children, you can get a job working with children, but even if you hate English, you still have to take it. (530487)*

Going to college: parents' education matters, but so do students' opinions about school and work

Joan and Tom did not go to college. Neither did most of the other employed high school students who wrote that they valued work more than school. These decisions could have been influenced by many factors. Family background, first of all, has been found by numerous studies to be correlated with children's educational attainment. Consistent with previous research, the NCRVE survey also found that high school students whose parents had college degrees were more likely to attend college themselves (Stern et al. 1997).

But parents' education is not the only factor influencing high school students' decisions about going to college. Since most young people who do not attend college after high school go to work instead, the perceived value of school versus work presumably plays a part in their decision. Although this perception itself may be influenced by family background, it may also be influenced by

students' own experience. For example, the following statements were written by working students who all eventually went to college after high school, despite their parents' lack of college degrees. The statements all reveal students grappling with decisions, and they all come out near the middle of the continuum described above, having found value in both school and work:

> *Working and school are both similar in many ways. Both are jobs which require time, desire, and appropriate behavior. Both (usually) require supervision, and deal with other people. Both can get you somewhere in life if you have the right attitude and will to accomplish something.*
>
> *There are some differences in working and school, also. School is totally (after age 16) the person's own decision whether or not to continue. Working is also the person's own decision, yet money factors may change the person's direction. School is profitable in that you learn new and important things, where working is profitable in money. (160148)*
>
> *School and work are similar in that they are both things you have to do. But they should also be things that you enjoy and that you gain something from (either knowledge or pay). They are at times boring, but at other times interesting. They are two of the most important things in life, but they should not dominate your life and not allow you to do other things that you enjoy. They are different in that school prepares you for life and gives you the necessary skills for a good life. Working gives you the money necessary to live. (330349)*
>
> *I don't think that I have to work now -- but I do think I have to go to school. I don't think that people realize you do get paid for going to school -- it's the education and it'll make you money in the long run. It just takes awhile to see that. I wouldn't let my grades go because of work -- I'd quit working. Both are rewarding when you see the end result but they both take up a lot of time. (360183)*

Conclusion

Some of the students' statements reported here can help to explain why numerous studies have found that working while in high school does not

necessarily detract from academic performance, and why students who work a moderate number of hours per week on average tend to do even better in school than those who do not work at all. At least three distinct trains of thought can be found in these statements.

First, working may enhance students' commitment to school if they believe that both prepare them for the future, by developing their capacities for taking responsibility, completing tasks on time, and dealing with other people. In this way, experiencing the demands of work validates the demands of school in students' minds.

Second, some students report that their jobs are so unpleasant that they serve as object lessons, warning them to stay in school. Even if school is bad, work is worse (Behn et al. 1983), at least the kind of work available without more education. This experience reinforces students' determination to continue in school so that they can qualify for more desirable jobs.

Third, in a more positive vein, other students write that work and school are interesting and enjoyable, at least sometimes. These statements echo reports from high schools that have organized the academic curriculum around work-related themes and connected students' work experience with their academic studies (Grubb 1995, Murnane and Levy 1996, Olson 1997, Urquiola et al. 1997). Seeing a connection between academic concepts and practical applications on the job can stimulate students' intellectual curiosity and raise their educational attainment (Steinberg 1998, Maxwell and Rubin 1997). Although the NCRVE survey did not include schools that had adopted this approach, some of the students' statements suggest that the connections they saw between school and work were enhancing their interest in both.

References

Bailey, T. and Merritt, D. (1997). School-to-work for the college bound. MDS-799. Berkeley, CA: National Center for Research in Vocational Education, University of California.

Behn, W.H., Carnoy, M., Carter, M.A., Crain, J.C., and Levin, H.M. (1983). School is bad, work is worse. School Review 83: 49-68.

Cagampang, H. (1993) Learning from school-based work experience programs, codebook: Merged data files for high school and two year college students. Berkeley, CA: National Center for Research in Vocational Education, University of California.

Education Commission of the States (1997). Profiles in connecting learning and work: State initiatives. Denver: Education Commission of the States.

Grubb, W.N. (1995). Education through occupations in American high schools. Volume 1, Approaches to integrating academic and vocational education. Volume 2, The challenges of implementing curriculum integration. New York: Teachers College Press.

Light, A. (1997). High school employment, high school curriculum, and post-school wages. Unpublished manuscript. Washington, D.C.: U.S. Bureau of Labor Statistics.

Maxwell, N. L. and Rubin, V. (1997). The relative impact of a career academy on post-secondary work and education skills in urban, public high schools. Hayward, CA: Human Investment Research and Education, California State University.

Mortimer, J.T. and Johnson, M.K. (1998). Adolescent part-time work and educational achievement. In Borman, K. and Schneider, B. (eds.): Youth experiences and development: Social influences and educational challenges. National Society for the Study of Education 1998 Yearbook.

Mortimer, J.T. and Johnson, M.K. (1997). Adolescent part-time work and post-secondary transition pathways: A longitudinal study of youth in St. Paul, Minnesota (U.S.). Minneapolis: Life Course Center, University of Minnesota. Unpublished manuscript, revised March 4.

Murnane, R.J. and Levy, F. (1996). Teaching the new basic skills. New York: The Free Press.

Olson, L. (1997). The school-to-work revolution. Reading, MA: Addison-Wesley.

Steinberg, A. (1998). Real learning, real work. New York and London: Routledge.

Stern, D., Finkelstein, N., Stone, J.R. III, Latting, J., and Dornsife, C. (1995). School to work: Research on programs in the United States. Washington and London: Taylor and Francis, Falmer Press.

Stern, D., Finkelstein, N., Urquiola, M., and Cagampang, H. (1997). What difference does it make if school and work are connected? Evidence on co-operative education in the United States. Economics of Education Review 16(3): 213-226, 1997.

Stone, J. R. III, Stern, D., Hopkins, C., and McMillion, M. (1990). Adolescents' perception of their work: school supervised and non-school-supervised. Journal of Vocational Education Research 15(2): 31-53.

Urquiola, M., Stern, D., Horn, I., Dornsife, C., Chi, B., Williams, L., Merritt, D., Hughes, K., and Bailey, T. (1997). School to work, college and career: A review of policy, practice, and results 1993-97. MDS-1144. Berkeley, CA: National Center for Research in Vocational Education, University of California.

Vickers, M. (1996). Working to learn. Cambridge, MA: TERC.

Figure 1

THE INVERTED U:

A possible relationship between hours worked and high school grades

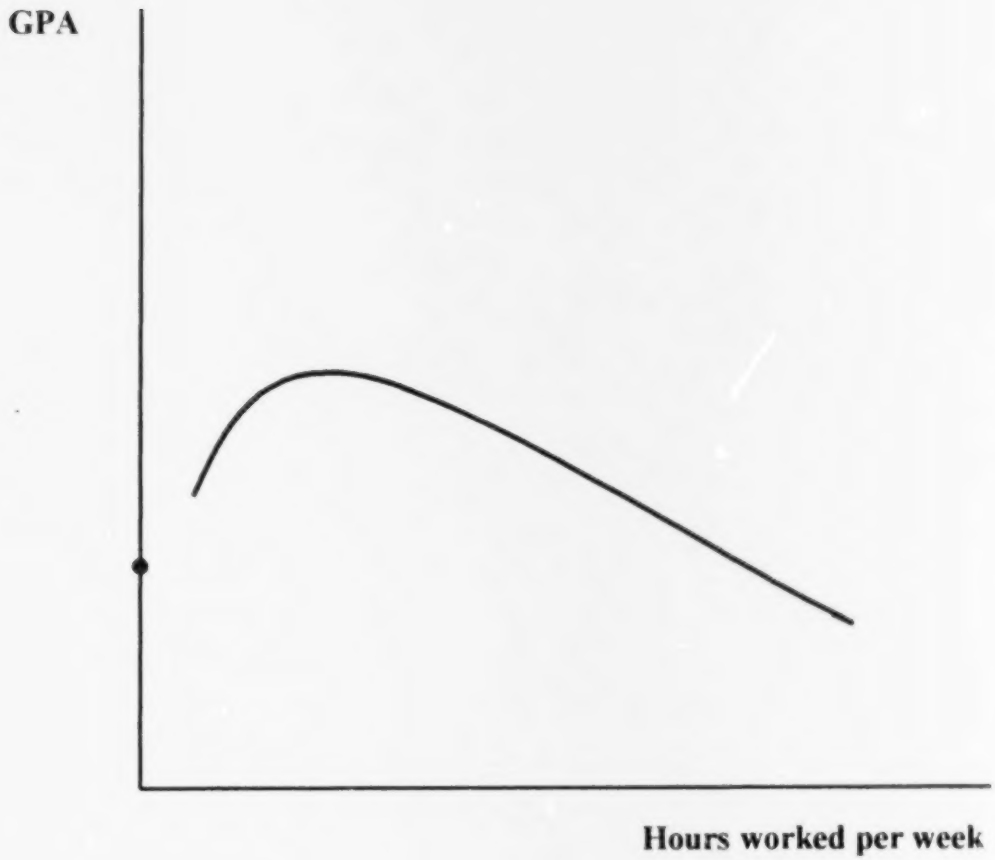

Figure 2

Comparing Work and School: A Continuum of Responses

School is more valuable; job is valuable only as a way to make money

A job when you're in school is just for money. School is more important than a job. (260538)

Working will earn you money while school earns you an education. I believe an education is more important than making money. School is also a totalitarian government, while I hope my job scene is more democratic. I had the unlucky chance of finding a job whereas I hated the work and the bosses. The job used none of my talent, intelligence, personality, innovativeness, and energy. This is not a good scene to compare school to, but I can safely say school has offered much. (230538)

Work and school are both valuable because they demand responsibility and develop

Working and school are almost the same because they both give you an opportunity to proove yourself and others that you can do a job and keep up with the job and you can do your best on the job. They both raise your self-esteem. (140060)

Both school and working prepare you for the disappointments and the great moments in life. They teach you responsibility to try as hard as you can to accomplish something. To set goals and try to reach them goals in the future. (140214)

Work and school both have value; combining them requires careful management of time.

I think working and school are same — what the same because in both you have to do the same things you may not want to do and both you have to put in long hours. School is preparing you for a good job and if you do good in school you do good on a job and when you do good on a job it prepares you for maybe a raise or a place for advancement. (330672)

I don't think that I have to work now — but I do think I have to go to school. I don't think that people realize you do get paid for going to school — it's the education and it'll make you money in the long run. It just takes awhile to see that. I wouldn't let my grades go because of work — I'd quit working. Both are rewarding when you see the end result but they both take up a lot of time. (360183)

Work and school both have value, but on balance work has more.

In both work and school you have to try hard, and finish your work. At work you get paid. You can meet new friends at work and at school. Work and school are both fun, but can both sometimes be boring. At work I feel like I've accomplished more than at school. (360404)

School is harder and not as fun as working is. In school you are not free to do as you please but at work I have freedoms. In both places you learn things but I seem to learn more at work. (530448)

Work has more value than school.

Work helps you be responsible and it pays you. School doesn't pay you and after all what do you get out of it anyway. (430864)